ABSTRACT

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The method disclosed monitors the status of a network by a network management system that includes information describing the current network topology information describing possible restoration routes. From this information, the network management system computes three measures of network health: (1) the sum of unrouted permanent virtual circuits, (2) the sum of permanent virtual circuits whose cost exceeds a prescribed multiple of an optimal route cost and (3) the sum of permanent virtual circuits off an optimal path. Each of these measures relates to a different aspect of network health, and collectively they provide a measure of overall network performance. The method compares the measures of network health to a threshold value and selects an optimum restoration route from the stored restoration routes.